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**SMALL-SIZED MOTOR**

Patent Number: JP61161947

Publication date: 1986-07-22

Inventor(s): FUJISAKI KIYONORI; others: 01

Applicant(s):: KIYONORI FUJISAKI; others: 01

Requested Patent:  JP61161947

Application Number: JP19850001885 19850109

Priority Number(s):

IPC Classification: H02K23/54

EC Classification:

Equivalents:

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**Abstract**

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PURPOSE: To increase a rotary force and to reduce a cost by bonding a magnetic material split plate to the opposed surfaces of permanent magnets of a plurality of armature coils, bonding a magnetic disk on the surfaces of opposite side, and forming a frame of a nonmagnetic material.

CONSTITUTION: In a flat motor in which a flat armature 2 and a permanent magnet 4 are opposed through an axial air gap, armature coils 34 are formed by winding conductive wires or foils 33 around a core 9, and split plates 35 made of magnetic materials are bonded to the opposed surface to the magnet. A disk 36 made of a magnetic material is bonded over the entire coil to the surface of the opposite side. Further, frames 6, 7 are formed of a nonmagnetic material, and a magnetic circuit is formed of a mounting plate 13, the magnet 4, the plate 35, the armature 2 and the disk 36. Thus, the frame can be formed of synthetic resin, and inexpensively assembled readily.

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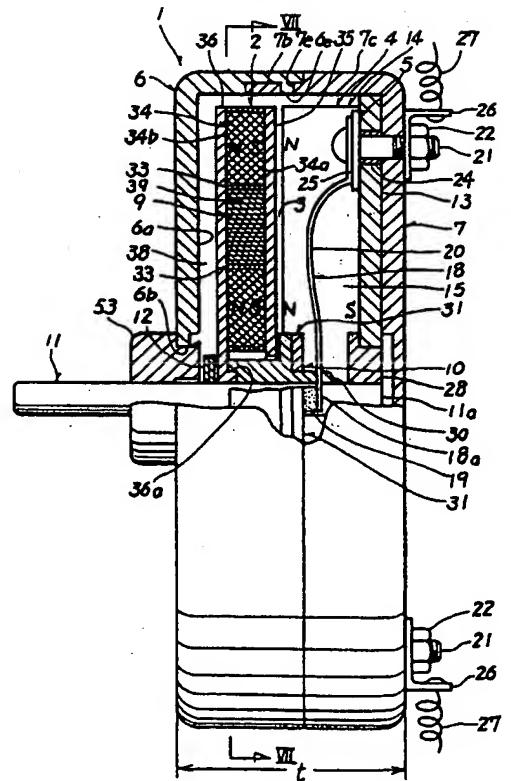
図面は本発明の実施例に係り、第1図は偏平形モータの完成状態における部分縦断面図、第2図は偏平形モータの分解斜視図、第3図は2分割された界磁用永久磁石と回転状態における電機子との相互関係を示す正面図、第4図は第3図に示すものの平面図、第5図は4分割された永久磁石と回転状態における電機子の相互関係を示す正面図、第6図は第5図に示すものの平面図、第7図は第1図のVII-VII矢視電機子の円板を省略した状態における正面図、第8図は第7図のVII-VII矢視縦断面図、第9図から第11図は電機子コイル用鉄心の製造方法に係り、第9図は薄板を芯金に巻き付ける状態を示す斜視図、第10図は断面円形に完成した鉄心コイルのプレス工程の前段を示す正面図、第11図は同じくプレス工程の後段を示す正面図、第12図は完成した電機子コイル用鉄心の斜視図、第13図はモータケース7の内側から見た正面図、第14図は第13図に示すものの平面図、第15図は第13図に示すものの縦断面図、第16図はモータケース6を内側から見た正面図

、第17図は第16図に示すものの平面図、第18図は第16図に示すものの縦断面図である。

1は偏平形モータ、2は電機子、3はエアギヤップ、4は永久磁石、6、7はモータケース、9は鉄心、13は取付板、33は導電線又は導電箔、34は電機子コイル、34aは表面、34bは裏面、35は分割板、36は円板である。

特許出願人 藤崎清則  
小林寿夫  
代理人 弁理士 内田和男

第1図



第2回

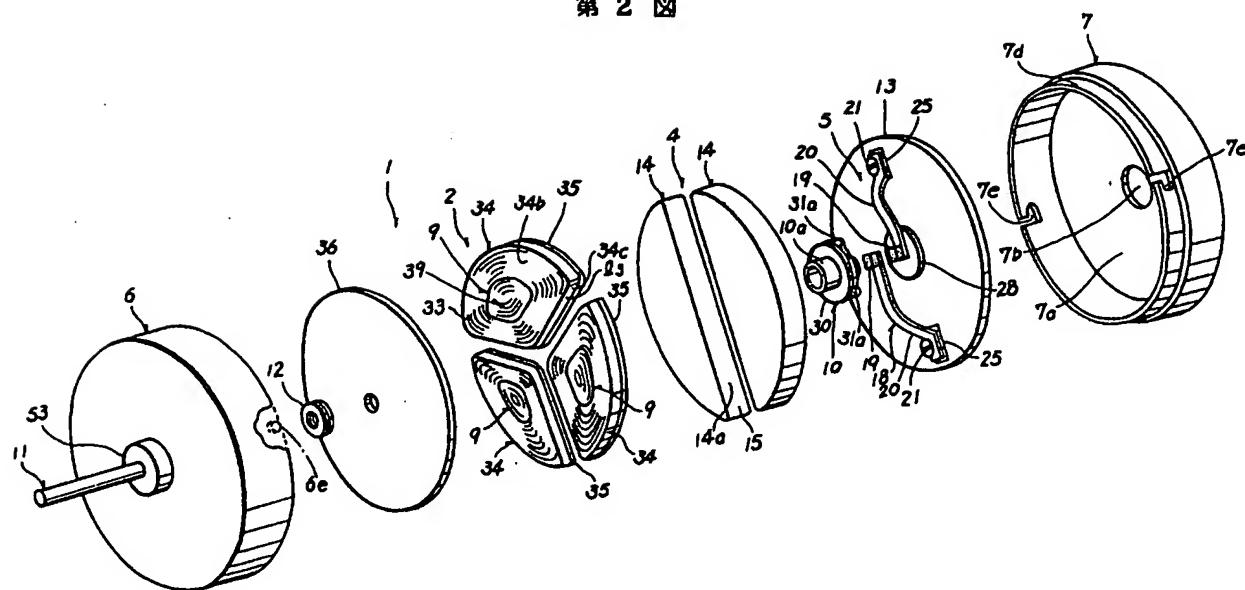
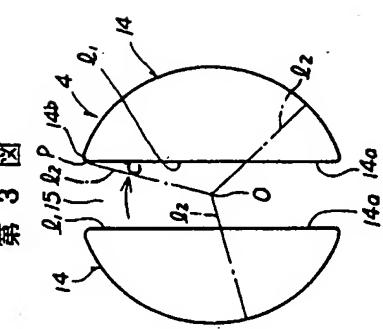


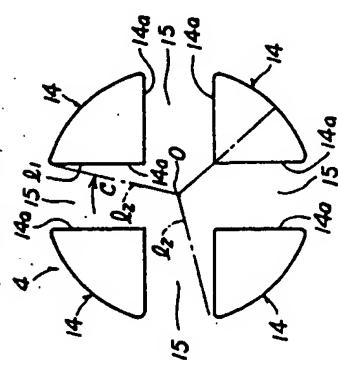
圖 3-3



第四圖



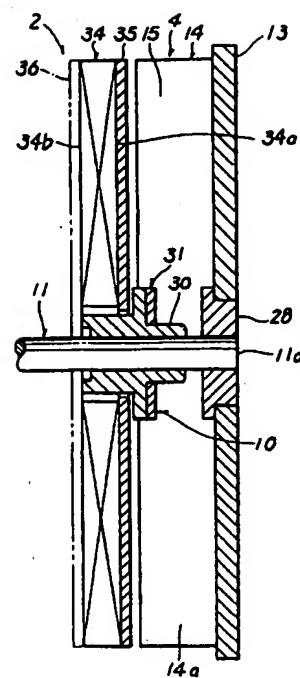
卷五



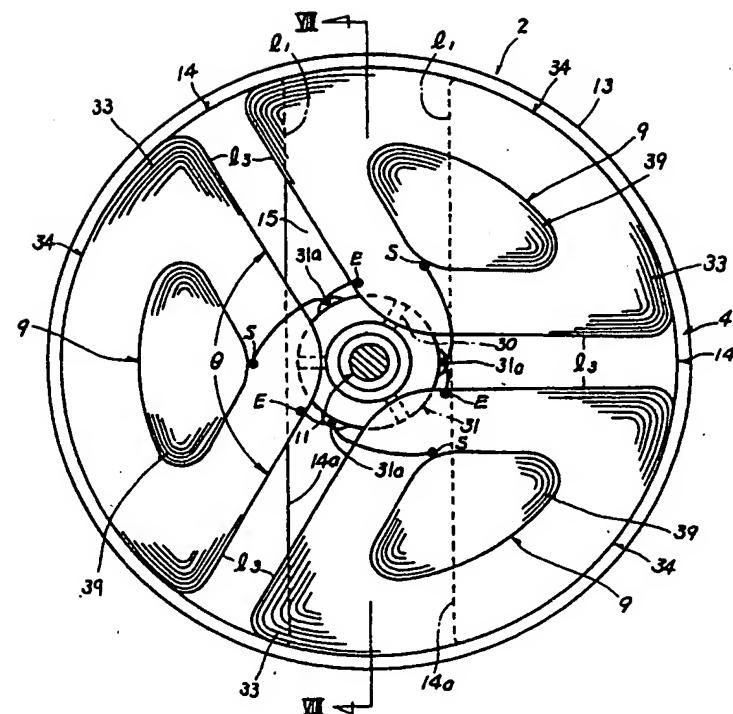
卷六



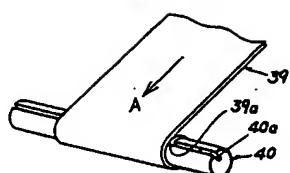
### 第 8 図



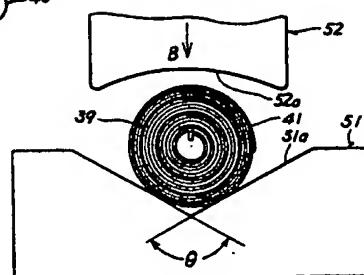
第 7 図



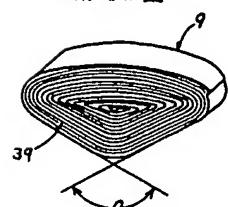
第 9 図



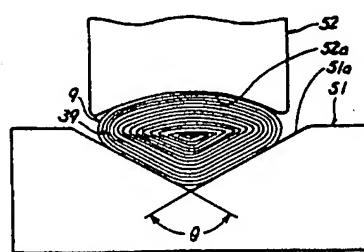
第 10 図

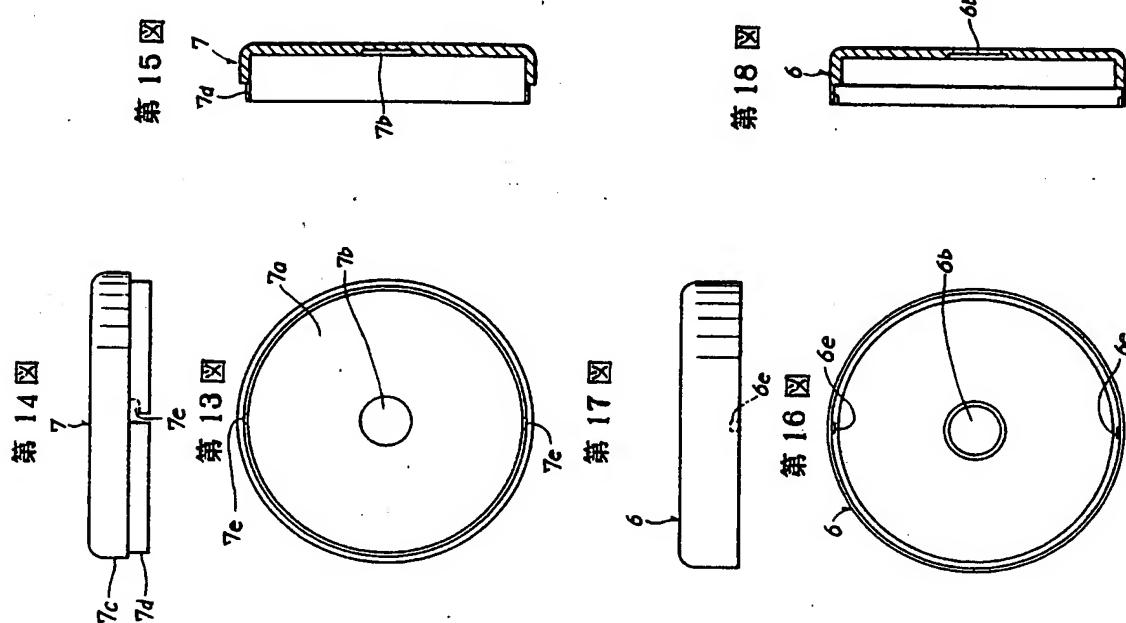


第12図



### 第11図





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